



From Puppyhood On A Guide to Health Care for Your Dog

Health Safeguards

Vaccinations. Safeguarding a dog's health against a number of diseases begins at the time of weaning. During the first one to three days of its nursing period, a puppy receives antibodies in its mother's milk called colostrum. When the puppy is six to eight weeks of age, this immunity begins to disappear. Consequently at eight to 20 weeks of age, a puppy becomes susceptible to a number of diseases. At this time its immune system should be stimulated to provide its own antibodies. This is why vaccination programs are initiated shortly after weaning. A vaccination program should be worked out by your veterinarian. You will also want to discuss a timetable for booster shots to provide a lifetime of protection for your dog.

Vaccinations to help safeguard a puppy's health are available for the following common and serious diseases:

Rabies is a disease of the central nervous system, usually transmitted through the bite of a rabid animal. All warmblooded animals are susceptible to rabies and some may serve as natural reservoirs of the virus. Among these are the skunk, fox, raccoon and bats. Bats are also found in urban areas.

On rare occasions the disease may be transmitted by the contact of virus-laden saliva with broken skin. Airborne infections may also occur in confined areas such as bat caves.

Early symptoms may include fever, listlessness or altered behavior. Late in the course of the disease, paralysis, muscle tremors, convulsion and death follow. Since rabies is usually fatal and can be transmitted to man, most states have laws requiring dogs to be vaccinated for rabies.

The first rabies vaccination will protect your puppy for one year. Your veterinarian will then work out a timetable for booster shots. You will receive a rabies certificate and a rabies tag to document the vaccination. Keep this certificate in a safe place in case your puppy is exposed to rabies or is suspected of biting someone.

Parvovirus and **Coronavirus** can affect dogs of all ages, but they are particularly devastating to puppies. Immediate treatment by a veterinarian for these diseases is essential.

Parvovirus is a common and deadly viral infection. Puppies under five months of age, older dogs and dogs stressed by other medical and environmental problems are most severely affected, but death can occur in any age group. Fever, vomiting, depression, severe diarrhea and dehydration can accompany the infection. In some instances, death can occur rapidly, at times, in a matter of hours. In other cases, the course can be severe, but more protracted. A dog exhibiting any of the signs of parvovirus should be examined by a veterinarian immediately. Fast action can increase a dog's chances for survival and help prevent permanent damage to its intestines. Puppies who manage to survive may have permanently damaged hearts. As a result, affected puppies may die weeks or even months after the infection has passed.

Important Parvovirus Warning

Because canine parvovirus can survive many weeks on contaminated surfaces, great caution should be taken in placing puppies where parvovirus has occurred. It is advisable to introduce only puppies who have been vaccinated and then only after thorough disinfection of the premises. Household bleach is an effective disinfectant.

Coronavirus is a highly contagious infection of the gastrointestinal tract. It is less severe than parvovirus. Symptoms include vomiting, diarrhea, fever and dehydration.

These viruses are transmitted from dog to dog via contact with infected feces, or the viruses can be carried by shoes, clothing, carriers, food and water bowls.

Follow your veterinarian's advice on a vaccination program for these diseases.

Canine distemper is a virus that affects the central nervous system. Early warning signs include fever, lack of appetite, mild drainage from the eyes, lethargy or depression. They may be followed by a severe discharge from the eyes and nose, severe diarrhea, pneumonia or convulsions.

The distemper virus can be carried from one dog to another or transmitted through contact from a contaminated environment. Generally distemper virus spreads as an airborne infection. Vaccination is the only effective control.

Hepatitis is a virus that affects the liver. It is most severe with puppies, but dogs of all ages are susceptible. Early signs of hepatitis are similar to those of distemper: fever, loss of appetite, depression, vomiting and diarrhea. Other symptoms include a discharge from the eyes or nose, uncontrolled bleeding, skin bruises or pain when the abdomen is pressed. A vaccination program planned by your veterinarian will control this disease.

Tracheobronchitis, popularly referred to as "kennel cough", primarily affects dogs living in close proximity, such as in a kennel or shelter. It is highly contagious, attacks the respiratory system, causes mild or no fever, nasal discharge and a dry, hacking cough. In severe form, kennel cough can cause a loss of appetite, lethargy and a moist, persistent cough together with nose and eye discharges. It can be treated with appropriate antibiotics.

Numerous organisms have been implicated as causes. It is possible for your veterinarian to vaccinate for three of the common components of this cough. The three vaccines are parainfluenza, canine bordetella, and adenovirus-2.

Leptospirosis is an acute infectious disease that spreads through contact with the saliva, urine or nasal secretions of infected animals. The early symptoms include fever, muscle pain, dehydration, shock, loss of appetite and vomiting. Within a day or two of the onset of the first symptoms, the temperature will drop sharply, breathing will be labored and stiffness, particularly in the hind legs, may be observed. For control, a vaccination program must be followed.

Internal Parasites

Be aware of a hidden health threat. Most internal parasites, commonly called worms, live in the dog's intestines where they feed and reproduce.

All puppies should be examined by a veterinarian for internal parasites. Your veterinarian can detect the presence of most worms by examining your dog's feces.

Some parasites, such as hookworms and roundworms, can be transmitted from the mother to her puppies before birth or during nursing.

Canine heartworm disease is among the most serious health hazards affecting dogs of all ages. Mosquitoes serve as an intermediate host to carry the heartworm larvae from infected to uninfected dogs. The larvae invade a dog's body through a mosquito bite and work their way to a dog's heart and nearby blood vessels.

At first, an affected dog shows few, if any signs of infection. Over a period of time, an affected dog will display less and less tolerance for play and exercise. More obvious signs are a dry, chronic cough, shortness of breath, weakness, nervousness, listlessness, and weight loss. Without treatment, death is the eventual result.

Heartworm is easy to prevent. In areas where dogs are exposed to mosquitoes year-round, preventive medicine must be given year-round, on a daily or monthly basis, depending on the medication chosen. If the mosquito problem is seasonal, medication should begin at the start of the mosquito season and continue well after the season. Even if the mosquito problem is seasonal, veterinarians may recommend year-round treatment.

Spraying for mosquito control, draining mosquito breeding grounds, avoiding mosquito-infested areas and keeping dogs screened from mosquitoes at night will also help reduce the threat of heartworm.

Hookworms are among the most dangerous of all the intestinal parasites, especially in puppies who can be infected from their mother. Hookworms attach themselves to the intestinal wall of an infected dog and suck blood, causing severe anemia which sometimes can be fatal. Puppies with heavy hookworm infections can die from blood loss before they are three weeks of age. Infected puppies may appear healthy the first week of life, but deteriorate rapidly the second and third week. They exhibit pale gums and pass very dark feces, indicative of partially digested blood.

Adult dogs with mild infections show no symptoms, but those with severe hookworm infection may exhibit anemia, dehydration, weakness and listlessness. Feces are dark red or black in color because of the presence of blood. Diarrhea may also be present.

Regular fecal examinations for the parasite by your veterinarian minimizes the risk of infection.

Roundworms are probably the most common parasite among young dogs. Puppies are infected by way of the placenta before birth. After birth, puppies can become infected by larvae in the mother's milk. In the small intestine, roundworms compete with the puppy for nutrients, resulting in stunted growth and poor health. Roundworms often make a puppy look "potbellied." Other signs include diarrhea, poor haircoat, listlessness and poor growth.

Microscopic examination of fecal matter is needed to diagnose roundworms as well as hookworms. Your veterinarian can prescribe appropriate medication and a schedule to follow to prevent reinfection.

Whipworm infection can become severe before any noticeable symptoms appear. As the infection progresses, symptoms include diarrhea, abdominal pain, nervousness, weight loss and anemia. Usually these problems are seen in puppies over three months of age. Untreated severe whipworms may occasionally be fatal.

Whipworms pass directly from one dog to another when a dog consumes food, feces or water contaminated with infective eggs. Your veterinarian can diagnose whipworm infection by microscopic examination of fecal matter and can prescribe appropriate medication.

Tapeworms can be transmitted by fleas, rodents or rabbits which may be eaten by dogs. A mild tapeworm infection may go unnoticed. Signs of a more severe tapeworm infection include abdominal discomfort, lethargy and diarrhea alternating with constipation.

There are numerous species of tapeworm. Different tapeworm species require different medications. Consequently, a veterinarian's diagnosis and instructions for administering any wormer are important.

Giardia is one of the most common of the protozoa that can infect dogs. It can be acquired by direct contact with fecal matter containing the parasite as well as from parasite-contaminated food and water. Symptoms, which can be intermittent or continuous, include foul-smelling feces, which may contain mucus, loss of appetite and weight loss. Routine methods of examination usually do not reveal the presence of giardia. Your veterinarian can perform fecal examinations designed to reveal this type of parasites. Once diagnosed, specific treatment is available.

Coccidia are common parasites of dogs, especially puppies. Eggs passed in the feces of the infected dogs become infective to other dogs within one to several days.

The most common symptoms include diarrhea, abdominal pain, dehydration, weight and appetite loss. However, coccidia may be present with no symptoms.

Veterinary diagnosis is made by examining the feces using the same methods as for the detection of hookworms and roundworms. Several medicines are reported to help control coccidia, but the general health of the dog and the function of its immune system appear

to be important.

More About Internal Parasites

Usually signs of internal parasites are slow and subtle and may be overlooked by the dog owner or confused with other conditions.

General signs of parasitic infection include weakness, poor appearance, emaciation, distended abdomen ("potbelly"), rough haircoat and paleness of membranes of the mouth and, in some cases, frequent digestive upsets and diarrhea. Affected dogs may eat well and their temperature remains normal, but there is a loss of energy.

Consult your veterinarian as to the timing and methods of fecal examination and treat affected dogs precisely as directed.

Be aware that products that work well on dogs may be hazardous to cats and other animals. Some products are hazardous when improperly combined.

Important preventive measures are proper nutrition achieved through feeding a nutritionally complete and balanced dog food and maintaining strict sanitary conditions in the dog's environment.

External Parasites

Combatting Discomfort and Disease. Dogs are subject to attack by a number of external parasites who live on a dog's skin. They not only cause irritation, but sometimes carry diseases. As you groom your dog, examine its haircoat for any evidence of parasites.

Fleas are tiny insects that feed on the blood of animals and create mild to severe discomfort. They cause chronic scratching and, if swallowed by a dog, can also transmit tapeworms.

Flea bite allergy is the most common allergy affecting dogs. It occurs when a dog is exposed to flea saliva as the flea bites. The saliva acts as an allergen and can cause intense itching. Hair loss and skin infections are other signs of flea allergy. Controlling fleas is essential in managing this type of allergy.

Fleas can hatch in a dog's bedding, carpets, furniture and out-door areas. To control fleas, the dog's environment as well as the dog must be treated.

Keeping the environment flea-free involves dealing with all stages of the flea life cycle. Fleas live on host animals and move readily from dog to dog, man to man, or from man to dog or other animals. Eggs are laid loose in the dog's haircoat and usually fall off soon afterwards and are generally hatched in four to seven days. Animals passing through an infested area pick up these newly hatched and developing fleas.

Special attention should be paid to the dog's sleeping area. It should be kept clean and the bedding should be washed frequently. In the house, thoroughly vacuum all carpets and crevices, under cushions, rugs and in the corners of upholstered furniture. Discard the vacuum bag because it may harbor fleas. Some flea control in the yard is possible through spraying.

Thorough cleaning and vacuuming help, but a professional exterminator may be needed to control heavy infestations. Multiple treatments may be needed to remove fleas from the household environment.

Fleas are diagnosed by finding either the parasites themselves or black specks called "flea dirt" (flea excrement) on the dog's haircoat.

Many preparations are available to aid in flea control. A once-a-month tablet for flea control is available through veterinarians. This tablet kills the flea eggs deposited on a dog. Adult fleas can still bite the dog and deposit eggs. Dogs can get an allergic reaction from the flea bites as well as tapeworms if a flea is ingested. Products to control fleas in the house and yard are also needed in a complete flea control program, especially in the case of moderate to severe infestations. Be certain the label on any product you use states the product is safe for dogs and follow label directions. Your veterinarian can also provide advice about products that will be effective in your particular situation.

Ticks are bloodsucking parasites and one of the most difficult to control. Because ticks suck many times their weight in blood, a heavy infestation on a dog can cause moderate to severe anemia. This condition can result in the death of puppies. The bites also cause irritation to the skin and secondary infection of tick bites is common.

The two most common kinds of ticks infecting dogs are the brown dog tick and the American dog tick. The brown dog tick is known to carry a parasite of the red blood cells as well as other infectious diseases. The American dog tick carries a number of diseases including Rocky Mountain spotted fever and tularemia.

Lyme disease is an infectious disease transmitted by the deer tick. It is being diagnosed with increasing frequency in the United States.

After walking your dog in a wooded area or field, always check for ticks. If you remove individual ticks, extract them manually and be certain that the mouthpiece does not remain in the puppy's skin. Remove the entire head and its mouth parts with tweezers or by the fingers protected with a paper towel, tissue or rubber gloves. Pull upward with a steady, even pressure. Do not twist. Wash hands thoroughly and disinfect the bite site.

As with fleas, proper treatment of the premises is essential to control ticks. Use a pesticide designated for ticks according to label directions.

Remove your dog from any area to be treated. Indoors spray its sleeping area and along baseboards, door frames and other cracks and crevices. Repeat the treatment as needed.

In tick-infested areas, keep grass and weeds cut short. Spray pesticides according to label directions. Shrubbery should be sprayed up to a height of two to three feet.

Lice are generally not common on healthy dogs. Serious infection usually occurs on poorly nourished and poorly managed dogs. Lice are classified by their feeding habits as either biting or sucking. Sucking lice injure their host by drawing blood which can result in anemia. This blood loss is especially dangerous to puppies. The bites may be very irritating to the dog's skin, leading to self-injury.

Biting lice feed by chewing on dry skin, scales and scabs. This can cause skin irritations, often preventing sleep and may also cause diarrhea and appetite loss.

Infected dogs should be isolated and treated with any of a number of commercial products in the form of dips, sprays or shampoos.

Mange is a general term for parasitic diseases caused by any of several microscopic mites. A veterinarian should diagnose and treat a mange infestation as soon as possible.

Demodectic, or red mange, is seen primarily in young dogs and does not appear to be transmitted to other dogs or humans. However, young puppies may acquire the parasite from their mother while they are nursing. It is usually a mild, localized infection, found in small patches around the eyes and on the face, neck and limbs. Symptoms include hair loss, mild redness and some scaling of the skin. Serious secondary infection may result and treatment can be difficult.

Sarcoptic mange, or scabies, is highly contagious and can be transmitted to humans as well as other dogs. The mites burrow into the skin, causing irritation which leads to intense itching by the infected dog. The typical pattern of distribution includes the ears, chest, limbs and abdomen. Serious self-injury from scratching and biting and secondary infections are likely to occur if the infection is not treated.

Ear mites cause a thick, dark reddish-brown material to exude from the ears of the dogs. A foul odor to the external ear may also be present. Affected dogs make shake their heads and scratch around their ears, causing considerable self-injury.

Because ear mites can be transmitted by direct contact, all animals in contact with the infected animal should be treated. For all mite infections, your veterinarian can provide diagnosis and effective treatment.

Important Pesticide Precautions

- When using pesticides the importance of reading the product information on the label cannot be overemphasized. It is equally critical to follow all instructions on the label exactly.
- Remove all animals from the area to be treated.
- Do not reapply more often than recommended to avoid overexposure to the pesticide. .Protect yourself by wearing rubber gloves and protective clothing.
- Watch for allergic reactions by animals and people.
- Store pesticides in their original or clearly labeled containers where they are out of the reach of children and pets.
- Do not allow dogs and other animals into the treated area until it is thoroughly dry.

Fungal Infection

Despite Its Name, Ringworm Is Not A Worm. It is a highly contagious fungus infection of the skin that can be transmitted to your dog by other infected animals, by humans or by contacts with the soil. Puppies and young dogs as well as children are most susceptible. Ringworm lesion is a rapidly spreading, circular, hairless, scaly area edged in red. It may be accompanied by mild itching. Because ringworm can be transmitted to other animals and humans, the infected dog must be isolated and treated by a veterinarian. The dog's bedding should be destroyed. Carpets and upholstered furniture must be thoroughly vacuumed and the vacuum bag discarded.

Spaying and Neutering

Be A Responsible Dog Owner. Lack of information or misinformation about neutering and spaying are a primary cause of millions of puppies and dogs being euthanized or abandoned each year. Some dog owners are fearful that the procedure might be painful or cruel or that it will result in a personality change.

Separating myth from reality should reassure dog owners that neutering/spaying not only helps solve the problem of unwanted dogs but also contributes to their health and well-being.

Myth: Neutering/spaying changes a dog's personality.

Reality: While this procedure may decrease aggressiveness, the dog's genetic makeup and the attention and training it receives are factors that shape its personality.

Neutering is usually performed just as a dog is approaching puberty. The changes in a dog's playfulness and sleeping habits that normally develop at puberty are sometimes attributed to this procedure.

Myth: Females have a sweeter, gentler personality if allowed to have one litter before being spayed.

Reality: No evidence from behavioral research or from clinical observations supports this belief. Some animal behaviorists suggest that this is "the placebo effect." The owner expects that breeding will bring about a behavior change and this leads to the assumption that behavior has improved.

Myth: Neutered/spayed pets become obese.

Reality: Neutering/spaying are often associated with obesity because reduced activity and metabolic changes may result. This problem can generally be avoided by close monitoring of the dog's diet (eliminating table scraps and, if necessary, reducing the amount of dog

food offered). In addition to diet management, regular exercise and play periods should also help prevent obesity.

As in any surgery, neutering or spaying may have possible complications which you can discuss with your veterinarian. However, the benefits of neutering and spaying outweigh most complications.

Health Benefits of Neutering and Spaying

Spaying a female before her first heat cycle protects against mammary tumors. However, if this surgery is done late in her life it does not provide this benefit. Early spaying also helps prevent the development or progression of several reproductive tract diseases.

Females come into heat at fairly regular intervals. With each heat cycle may come the unwelcome presence of unaltered male dogs. Spaying prevents this annoying problem.

Solid medical evidence supports the advantages of neutering the male dog. The risk for testicular cancer as well as other testicular diseases is eliminated. The desire to roam and aggression toward other dogs usually diminish. A neutered male usually becomes a contented stay-at-home companion. Consequently, the threat of his wandering into the path of an automobile or being killed or injured in fights with other dogs is reduced. Urine marking is also reduced.

Dental Care

Don't Neglect the Teeth. The kind of dental care a dog receives over the years has a great impact on its health and longevity. Dogs can develop many of the same dental problems experienced by people.

Dog owners are realizing that regular dental care helps promote good health in dogs. Although dogs usually do not need the extensive dental treatments many people require, they do need dental care on a regular basis, especially as they grow older. Dogs have 28 deciduous (temporary) teeth and 42 permanent teeth. Deciduous teeth (sometimes described as "milk teeth") begin to appear when a puppy is about four weeks of age.

Shedding of deciduous teeth in favor of permanent teeth is a gradual process occurring between 14 and 30 weeks of age. During the time puppies are losing their teeth, they may eat slightly less and may tend to chew more. Hard rubber or rawhide toys made especially for dogs are a good investment to help prevent household damage during this time.

Occasionally a puppy retains some deciduous teeth after the permanent teeth have appeared. This retention may result in damage to the soft tissues of the mouth and may even accelerate wear of permanent teeth. A veterinarian should be consulted to determine whether or not removal is necessary.

The most common dental problems dogs experience result from plaque and calculus buildup. Food material, bacteria and saliva may accumulate and adhere to the tooth surface, forming a soft plaque. If plaque buildup continues, solutions of chalk-like materials form a hardened dental calculus on the tooth surface.

Calculus is seen more frequently in older pets fed large quantities of soft foods. If left unchecked, plaque and calculus buildup can eventually cause inflammation of both the gums (gingivitis) and the membrane lining of the tooth socket (periodontitis).

Without proper treatment, the teeth may become infected and fall out. The infection resulting from these conditions may spread to other parts of the body such as the kidneys or heart valves.

Unfortunately, signs of dental problems are often subtle and may go undetected for months or even years. Consequently, they are far advanced before being discovered. Unpleasant breath and salivation are signs of a dental problem.

Regular dental examinations by a veterinarian are recommended. A good opportunity for this dental checkup is during the dog's yearly physical examination when vaccinations are given. Regular cleaning and scaling under anesthesia, done by a veterinarian, aids in preventing or minimizing dental problems.

Dry crunchy foods such as Purina ® Puppy Chow ® brand puppy food and Purina ® Dog Chow ® brand dog food can be helpful in keeping teeth cleaner. The dog's chewing action while eating a dry food acts like a toothbrush as particles scrape against the teeth to help remove plaque. However, there is no substitute for regular dental care.

If possible, accustom a young puppy to having its teeth cleaned on a regular basis at home. Use a mixture of baking soda with a little water added to form a paste or a toothpaste formulated specifically for dogs. Apply with a soft toothbrush or a piece of gauze wrapped around the finger. Do not use toothpaste formulated for humans because dogs swallow, rather than spit out such a preparation, which may cause a digestive upset.

A Question About Age

How does a dog's years of age compare to those of people?

No single rule is universally accepted. One rule of thumb suggests that the dog's first year is roughly equivalent to 14 human years. After that, each year is approximately equivalent to five years for people. Like people, dogs mature at different rates. Several factors influence a dog's longevity:

- The dog's genetic makeup.
- A lifetime of complete and balanced nutrition appropriate for a dog's lifestage.
- Regular veterinary care.
- Proper daily care including clean, comfortable, draft-free housing.

Evaluating Your Dog's Health

Your Dog Cannot Tell You How It Feels. Consequently, it can become quite ill before the signs of illness become apparent. Unless your dog is unconscious, bleeding or otherwise visibly demonstrating its distress, how can you know if your dog is ill?

Know your dog. Be aware of its usual behavior and appearance to provide a basis for evaluating its health on a day-to-day basis.

Contentment and alertness are two signs of a healthy dog. Contented dogs usually stretch on rising and look relaxed and unworried when resting. Healthy dogs are alert and respond to the activity around them. Observe your dog for any signs of illness which include:

Unusual behavior:

- Loss of appetite - it is normal for a dog to go "off feed" for a day or two, but if loss of appetite persists, consult your veterinarian
- Lack of interest in what is going on
- Hiding in dark places
- Persistent coughing
- Scratching or chewing at feet, skin or haircoat

Eyes:

- Discharge from the eyes and nose
- Red, inflamed or cloudy eyes

Ears::

- Persistent head shaking, scratching ears
- Strong odor, tenderness and swelling around the ears

Mouth:

- Unpleasant breath odor and /or swollen gums

Poor Appearance:

- Haircoat with a harsh feel or dull texture
- Dull and flaky skin
- Potbelly or thinness

Other Warning Signs:

- Blood in the urine
- Mucus or blood visible in the stools
- Repeated vomiting over several days
- Unusual lumps under the skin

An Important Caution

Obesity is the number one nutritional disorder among dogs. Studies suggest that over 30 percent of the dogs presented to veterinary clinics are overweight.

The same health problems obesity causes for humans can also affect overweight pets. Cardiovascular and respiratory systems and other major organs can adversely be affected. A veterinarian may find it difficult to assess a dog's physical condition because excess body weight can mask symptoms or aggravate existing abnormalities. Dogs weighing 20 percent or more over ideal body weight may be obese. Your veterinarian can advise you as to your dog's body condition.

Among dogs the incidence of obesity increases with age, with a low of 12 to 20 percent at one to four years of age to about 40 percent over 12 years.

The following guidelines for dogs who are overweight or have the tendency to become overweight are presented as suggestions. They are not intended to replace the advice of a veterinarian.

- Reduce the dog's calorie intake by feeding less. A reduction of not more than one-fourth the previous caloric intake is recommended.
- Omit feeding food from the table.
- Switch to a lower calorie dog food such as Purina ® Fit & Trim ® brand dog food formulated for adult dogs in need of a weight reduction or weight maintenance program.
- Do not feed high calorie treats.
- Avoid diets high in fat.
- Enlist the cooperation of all family members to help ensure a successful weight reduction program.
- Two or three small daily feedings help prevent the dog from feeling hungry and keep it from begging.
- Combine exercising your dog with diet management.
- Make certain plenty of fresh drinking water in a clean bowl is available at all times.

The A, B, C' s of Health Care for Your Dog

Always feed a nutritionally complete and balanced dog food appropriate for your dog's life stage and activity level.

Bring your dog to your veterinarian regularly for its vaccinations, internal and external parasite check and physical examination.

Consider your dog's environment - keep it clean and comfortable.

